



# CoderDojo

Season 4  
Episode 4  
11/1/2015

# Find Your Group

by grade for now



3 & 4



5 & 6

Might combine 5&6  
with 7+ depending  
on numbers



7-9

# Backup if the Wifi is flakey

Last session we had good luck but just in case ...

## Install Scratch Offline Editor

- From CD or Thumb drive
- If you are following along at home
  - <https://scratch.mit.edu/scratch2download/>

# Part 1: The first hour

I want to emphasize three things in our first hour:

1. Working with a partner or in a group
2. Telling a story
3. Remixing each other's work

# Working with Partner/Group + Telling a Story

For the story let's break it up into three parts:

1. The Beginning (Introduction)
2. The Middle (Build conflict to a climax)
3. The Ending (Resolution)

Start with your Design Journal & Partner/Group and think of a beginning

# Start your story using Scratch

Unit 3 in the Creative Computing resources has projects to introduce:

- Characters
- Conversations
- Scenes

**CHARACTERS**  
DO YOU WANT TO CREATE YOUR OWN SCRATCH BLOCKS?  
Experiment with the Make a Block feature in Scratch!  
In this project, you will create and use blocks for data we talked about in our lessons.

**START HERE**

- Choose from the library, paint, or upload two sprite characters.
- Click on the Make a Block button in the More Blocks category to create and name your block.
- Add blocks under the Define Block to control what your custom block will do.
- Experiment with using your block to program your character's behavior.
- Repeat!

**THINGS TO TRY**

- Feeling stuck? That's okay! Check out the Make a Block feature. <http://bit.ly/scratch-blocks>
- Explore other projects in the Conversations Studio to see how others have used the Make a Block feature.
- Remember, there can be more than one way of defining the same behavior. Experiment with different block combinations to try out multiple options and outcomes.

**CONVERSATIONS**  
WHAT ARE DIFFERENT WAYS TO COORDINATE INTERACTIONS BETWEEN SPRITES?  
In this activity, you'll explore different ways to program sprites to have conversations! Experiment with firing and explore using broadcast by remixing a joke project.

**START HERE**

- Look inside the Penguin Jokes project: <http://scratch.mit.edu/projects/1001800>
- Investigate the code to see how the wait and say blocks are used to coordinate the conversation.
- Remix the project to use the broadcast and when I receive blocks instead of wait blocks.

**FEELING STUCK?**  
THAT'S OKAY! TRY THESE THINGS...

- Brainstorm ideas with a neighbor! Generate a list of possible solutions and test them out together.
- Try using the broadcast and when I receive blocks in different parts of your project.
- Explore projects in the Conversations studio to get inspirations for different ways to coordinate conversations between sprites.

**THINGS TO TRY**

- Look for blocks under the sprites and the stage tabs to backdrop and test them out to see what they do.
- Need more inspiration? Explore the Scratch online community to discover projects that use multiple backdrops.

**SCENES**  
WHAT IS THE DIFFERENCE BETWEEN THE STAGE AND SPRITES?  
In this activity, you will create a project that experiments with backdrops. Use a story with multiple scenes or a slideshow.

**START HERE**

- Choose from the library, paint, or upload multiple backdrop into your project.
- Experiment with blocks from the Look and Events categories to create switching backdrops.
- Add scripts to the stage and sprites to coordinate what happens when the backdrop changes in your project.

**THINGS TO TRY**

- Look for blocks under the sprites and the stage tabs to backdrop and test them out to see what they do.
- Need more inspiration? Explore the Scratch online community to discover projects that use multiple backdrops.

**FINISHED?**

- Add your project to the Scenes Studio: <http://scratch.mit.edu/studios/1073550>
- Challenge yourself to do more! Add more backdrop changes to your project.
- Help a neighbor!
- Return to one of your previous projects or find a project you are inspired by and remix it by adding switching backdrops.

# Next we will submit our stories to the story studio I just made!

Submit the beginning of your story to the studio at <https://scratch.mit.edu/studios/1675084/>

Next find someone else's story in the studio and remix it to write the middle of the story!

When you have finished the middle post it back to the studio and pick another story to write the end!

Work for about 10 minutes on each section.

# Tools and Techniques to keep in mind

Figure out how to create a conversation.

Figure out how to change the scene.

Move your characters around.


Add special effects! Sounds, animations!

Look at the Sushi Cards for ideas.

## PASS IT ON

WHAT CAN WE CREATE BY BUILDING ON OTHERS' WORK?

In this project, you will start developing an animated story project, and then you will pass the story on to others to remix, extend, or reimagine!

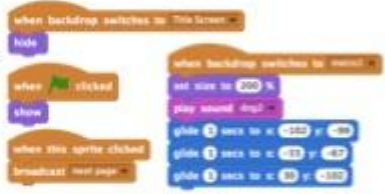



### START HERE


- Work on a story project that focuses on characters, scene, plot, or whatever element excites you.
- After 10 minutes, save and share your project online.
- Retate & extend another story project by remixing it.
- Repeat!

### THINGS TO TRY

- Brainstorm different possibilities for remixing, extending, or reimaging a story. Do you want to add a new scene to the end? Could you imagine what happens before the story begins? What if a new character was added? How about inserting a plot twist? What else?
- Adding comments in your code can help others understand different parts of your program. To attach a comment to a script, right click on a block and add a description.

### BLOCKS TO PLAY WITH



### FINISHED?

- Add your project to the Pass It On studio: <http://scratch.mit.edu/studios/475543>
- Help a neighbor!
- Return to all the projects you contributed to and check out how the stories evolved!



# Dojo Dialog

- Let's see everyone's story!
- Gallery Walk
  - Set up your laptop to demo your project
  - Walk around your room
  - Look at each other's work
  - Questions, comments, suggestions?

**Break Time (1:55?!?)**

**Please be back by**

**2:05**

# Project for the Second Hour

What holiday did we just have?

Let's do a Halloween themed:

- Game
- Story
- Music Video
- Whatever!

# Use Everything You've Learned

Use idea from earlier projects:

- 10 Blocks
- Orange Square, Purple Circle
- It's Alive
- Build a Band

Use the tips from the Sushi Cards

- How to make a timer
- How to keep score
- How to shoot things

# Dojo Dialog

- Gallery Walk
  - Set up your laptop to demo your project
  - Walk around your room
  - Look at each other's work
  - Questions, comments, suggestions?

# Scratch Studios

How we can share our work ...

Leave constructive comments ...

Remix a project that you like ...

You can find my studios at:

<https://scratch.mit.edu/studios/1184260/>

<https://scratch.mit.edu/studios/1184266/>

Feel free to add your projects to:

<https://scratch.mit.edu/studios/1350142/>